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## REMARKS

Applicant submits this Amendment in response to the Office Action of August 14, 2001 and the Interview with the Examiner of October 11, 2001.

All pending claims have been canceled without prejudice and have been replaced by the present claims 75 to 82. The new claims call for features that were called for in the previous claims.

As agreed during the Interview, the independent claim 75 calls for the features of (1) the administered fluid consists essentially of water, and (2) less than 3 microliters of water is administered. As discussed below, these features, alone or in combination, patentably distinguish over the prior art.

## REJECTIONS OF THE CLAIMS

### 1. Rejections under 35 U.S.C. §112, second paragraph

The Examiner rejected claims 48, 53, 62, 70, and 74 for their recitation of "1 to 2 microliters" as being improperly depending from a claim that calls for "less than about 2 microliters". Applicant traverses the rejection of these claims on this ground.

The rejection of these claims is rendered moot by the present Amendment. Applicant submits that this basis of rejection is overcome and requests the Examiner to withdraw the rejection of the claims on this ground.

2. Rejections under 35 U.S.C. §103(a)

The Examiner has rejected all pending claims, 44-74, as being obvious under 35 U.S.C. §103(a) over Embleton et al (WO 97/23177) in view of Laibovitz et al (U.S. Patent No. 5,997,518). Applicant traverses the rejection of the claims on this ground.

As discussed during the interview and in the previous Amendment filed on July 9, 2001, Embleton discloses (1) a minimum range of volume of treatment fluid to be between 3 to 8 microliters (page 3, last line), and (2) that the ophthalmic treatment liquids that may be used with the invention include:

6) Artificial tear/dry eye therapies, comfort drops, irrigation fluids, etc., e.g. physiological saline, water, or oils; all optionally containing polymeric compounds such as acetylcysteine, hydroxyethylcellulose, hydroxymellose, hyaluronic acid, polyvinyl alcohol, polyacrylic acid derivatives, etc. (page 13, lines 6-12)

The present invention, as called for in independent claim 75, distinguishes over Embleton in several ways.

(A) Embleton does not disclose treatment with an aqueous fluid that consists essentially of water.

(B) Embleton does not disclose administration of less than 3 microliters of fluid.

Moreover, Embleton does not disclose treatment the combination of features, that is treatment with an aqueous fluid that consists essentially of water and wherein less than 3 microliters are administered.

As agreed at the Interview, Applicant submits herewith two Declarations that establish (1) that artificial tear/dry eye therapies, comfort drops, irrigation fluids necessarily contain ingredients other than water, and (2) that the use of irrigation fluids requires more than 3

microliters to be effective. Thus, it is clear that the passage from Embleton used by the Examiner to support the rejection is not pertinent to the present invention.

Applicant submits, therefore, that claim 75, and claims dependent therefrom, distinguish over the disclosure of Embleton.

Present claims 78 and 82 calls for an average drop size of less than 20 microns. Embleton does not disclose average drop sizes of this size or smaller. Thus, these claims further distinguish over Embleton.

An additional distinction over Embleton is recited in claim 79, and claims dependent therefrom, which call for administration of the fluid in the form of a mist. Embleton discloses Embleton discloses a jet or stream of droplets.

In the Office Action, however, the Examiner stated that the feature of a mist does not distinguish over the jet or stream of droplets of Embleton. The Examiner stated on page 6 that:

The examiner does not recognize a distinction between mist, multiplicity of droplets, dispersed droplets in air, stream of droplets, or a cloud-like aggregation of minute globules in air.

Applicant respectfully disagrees with the Examiner. In the Amendment of July 9, 2001, Applicant submitted page 1231 of the Random House Dictionary of the English Language (1987), which defines the term "mist" as:

1. a cloudlike aggregation of minute globules of water suspended in the atmosphere at or near the earth's surface, reducing visibility to a lesser degree than fog. 2. a cloud of particles resembling this: *She sprayed a mist of perfume onto her handkerchief.* . . (emphasis in the original)

Applicant submits with the present Amendment pages 1027 and 1028 of the same dictionary, which defines the term "jet" as:

1. a stream of a liquid, gas, or small solid particles forcefully shooting forth from a nozzle, orifice, etc. 2. something that issues in such a stream, as water or gas . . .

It is clear that there is a definite distinction between a jet or a stream as disclosed by Embleton and a mist as presently claimed. Applicant submits that it is improper for the Examiner to reject claims calling for a mist on the ground that he does not recognize a difference between a mist and a jet or a stream. Applicant respectfully requests the Examiner to provide evidence that a mist and a jet or a stream are not different, as these terms are used in reference to the application of a liquid to the surface of the eye. Failing this, Applicant submits that the Examiner must recognize that the feature of a mist in the claims is a real distinction over the disclosure of Embleton.

The disclosure of Laibovitz does not fill in the gaps in the teaching of Embleton. Therefore, it is submitted that the claims are not obvious over the combined disclosure of Embleton and Laibovitz.

Laibovitz discloses a method for delivering small volumes of liquid to the eye. Laibovitz discloses that this delivery of small volumes permits the efficient use of therapeutic medications because administration of small volumes prevents runoff of the medications with resultant wastage of medication or loss of medication into the tear duct with subsequent inhalation and entry into the systemic circulation. Laibovitz further discloses a device that can deliver such small volumes. The device can deliver 1 to 5 micron sized drops in a total volume of 1 to 25 microliters in the form of a mist.

There is no disclosure in Laibovitz that such delivery is suitable for a method to moisturize the eye, as is presently claimed. The disclosure in Laibovitz involves an apparatus

and a specific purpose, that is as an apparatus for medicating the eye. Applicant cannot be certain, but Applicant recognizes that the apparatus of Laibovitz might be suitable for the presently claimed method. However, Applicant submits that it is improper for the Examiner to use the disclosure of Laibovitz, either alone or in combination with Embleton, to find obvious a novel and non-obvious use of the Laibovitz device.

Accordingly, because the combined disclosure of Embleton and Laibovitz does not suggest the present invention, Applicant submits that the present claims are patentable over these references.

#### CONCLUSION

Applicant submits that the claims, as amended herein, are in condition for allowance and requests an early notice to that effect.

Respectfully submitted,



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Attachments: Pages 1027 and 1028 of Random House Dictionary of the English Language  
Two Declarations of Dr. Rachel Garrett

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on January 9, 2002.

Dated: Jan 9, 2002



Howard M. Eisenberg



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# THE RANDOM HOUSE DICTIONARY OF THE ENGLISH LANGUAGE

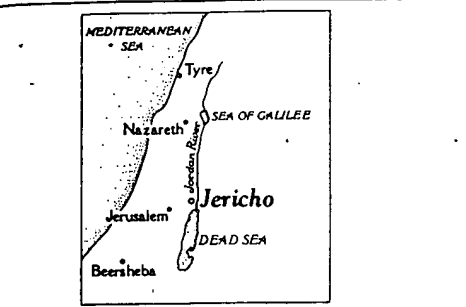
Second Edition

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Unabridged

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**Jericho** (jer/i kō'), n. 1. an ancient city of Palestine, on the Dead Sea. 2. a town on W Long Island, in SE New York. 12,739.

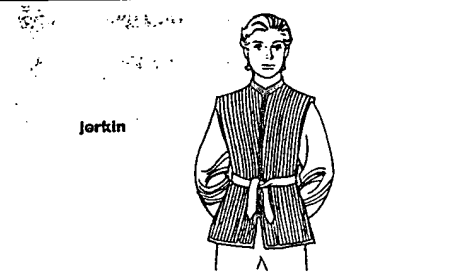


**Jericho** (jer/i kō'), n. *Ma-ri-a* (mä rē/ä), 1887-2, Austrian operatic soprano.

**Jerkin** (jürk), n. 1. a quick, sharp pull, thrust, twist, or the like; a sudden movement: *The train started with a jerk.* 2. a spasmodic, usually involuntary, muscular movement, as the reflex action of pulling the hand away from a flame. 3. any sudden, quick movement of the body, as in dodging something. 4. *Slang.* a contemptibly naive, fatuous, foolish, or inconsequential person. 5. (in weightlifting) the raising of a weight from under height to above the head by straightening the arms. 6. *Jerks, Brit. Informal.* See *physical jerks*. 7. *ance, deriving from the twist, in which the dancers rhythmically thrust out their pelvises and their shoulders.* 8. *Jerks, paroxysms or violent spasmodic muscular movements, as resulting from excitement evoked by religious services.* —*v.t.* 9. to pull, twist, move, or throw with a quick, suddenly arrested motion: *He jerked the child by the hand.* 10. to utter in a brusque, spasmodic way. 11. *Informal.* to prepare, dispense, or serve (sodas, ice cream, etc.) at a soda fountain. 12. to give a jerk or jerks. 13. to move with a quick, sharp motion; move spasmodically. 14. to talk in a jerky, spasmodic way. 15. *Informal.* to work as a jerk. 16. to dance the jerk. 17. *Jerk off, Slang (vulgar).* to masturbate. [1540-50; 1935-40 for def. 4; h. dial. var. of *jerk* to draw stitches tight (shoemaker's term), thus making the shoe ready to wear, OE *gerian* to prepare, make ready] —*Jerker*, n. *Jerkingly*, adv.

**Jerkin** (jürk), *v.t.* 1. to preserve (meat, esp. beef) by cutting in strips and curing by drying in the sun. —*n.* 2. *Syn.* [1700-10; back formation from *JERKY*]

**Jerkin** (jürk/kin), n. a close-fitting jacket or short coat, usually sleeveless, as one of leather worn in the 16th and 17th centuries. [1510-20; orig. uncert.]



**Jerkin-head** (jürk/kin hed'), n. a roof having a hipped or truncating a gable. Also called *shreadhead*. [1835-orig. uncert.]

**Jerkin-off** (jürk/ōf', -ōf'), n. *Slang (offensive).* a stupid, meddling, foolish, or lazy person; jerk. [1965-70; n. use v. phrase *jerk off*]

**Jerkin-water** (jürk/wō'tər, -wō'tər), adj. 1. *Informal.* significant and out-of-the-way: a *jerkinwater* town. 2. (merely) off the main line: a *jerkinwater* train. —*n.* 3. (merely) a train not running on the main line. [1875-amer.; JERK + WATER; so called from the jerking or drawing of water to fill buckets for supplying a locomotive]

**Jerkin-y** (jürk/kē), adj. *Jerkin-yer, Jerkin-yest.* 1. characterized by jerks or sudden starts; spasmodic. 2. *Slang.* y; foolish; stupid; ridiculous. [1855-60; JERK + -y] —*Jerkin-ily*, adv. —*Jerkin-iness*, n.

**Jerkin** (jürk/kē), n. meat, esp. beef, that has been cut in strips and preserved by drying in the sun; jerked at. Also, *Jerkin*. [1840-50, Amer.; alter. of *CHARQUI*]

**Jerusalem** (jer/ə bō/əm), n. 1. the first king of the biblical kingdom of the Hebrews in N Palestine. 2. (l.c.) a large wine bottle having a capacity of about four ordinary bottles or 3 liters (3.3 qt.).

**Jerusalem** (jer/əld), n. a male given name, form of *Gerard*. Also, *Jerold*.

**Jerome** (jə rom/; for 2, 3 also *Brit. jer/əm*), n. 1. *int* (Eusebius Hieronymus), A.D. c.340-420, Christian writer and Biblical scholar; chief preparer of the Vulgate version of the Bible. 2. *Jerome K(lap)lake* (klap/), 1859-1927, English humorist and playwright. 3. a male given name: from a Greek word meaning "sacred mountain."

materials or workmanship. [1875-80; short for *JERRY-BUILT*]

**Jersey** (jer/ē), n., pl. -ries. Chiefly *Brit. Slang.* a chamber pot. [1820-30; short for *JEROBOAM*]

**Jersey** (jer/ē), n., pl. -ries. Chiefly *Brit. Informal.* 1. a German. 2. Germans collectively. [1910-15; GER(MAN) + -y]

**Jersey** (jer/ē), n. 1. a male given name, form of *Gerard*, *Gerard*, *Jeremiah*, and *Jerome*. 2. a female given name, form of *Geraldine*.

**Jersey-build** (jer/ē bilt'), *v.t.* -built, -building. to build cheaply and flimsily. [1880-85; back formation from *jerry-builder*. See *JERRY*, *BUILD*] —*Jersey-build-er*, n.

**Jersey-built** (jer/ē bilt'), adj. 1. built cheaply and flimsily. 2. contrived or developed in a haphazard, unsubstantial fashion, as a project or organization. [1865-70; *jerry* (as in *JERRY-BUILT*) + *BUILT*] —*Syn.* 1. ramshackle, rickety, shoddy, slipshod.

**Jersey can**, n. 1. Also called *blitz can*. Mil. a narrow, flat-sided, five-gallon (19-liter) container for fluids, as fuel. 2. *Brit.* a can with a capacity of 4 1/2 imperial gallons (5.4 U.S. gallons or 20.4 liters). Also, *Jersey-can*, *Jersey-can*. [1940-45; appar. *JERRY* "German"; the British supposedly manufactured the can after a German prototype]

**Jersey** (jür/zē), n., pl. -seys. 1. a close-fitting, knitted sweater or shirt. 2. a plain-knit, machine-made fabric of wool, silk, nylon, rayon, etc., characteristically soft and elastic, used for garments. 3. (cap.) one of a breed of dairy cattle, raised originally on the island of Jersey, producing milk with a high butterfat content. [1575-85; after *Jersey*] —*Jerseyed*, adj.

**Jersey** (jür/zē), n. 1. a British island in the English Channel: the largest of the Channel Islands. 79,342 sq. mi. (116 sq. km). Cap.: St. Helier. 2. *Informal.* New Jersey. —*Jersey-an*, n., adj. —*Jersey-ite*, n.

**Jersey City**, a seaport in NE New Jersey, opposite New York City. 223,532.

**Jersey Giant**, one of a breed of large domestic chickens raised primarily for their meat, originally black but now with a white variety, developed in New Jersey by interbreeding Langhans and large Asiatic fowl.

**Jersey man** (jür/zē mən), n. 1. a native or inhabitant of the island of Jersey. 2. a native or inhabitant of New Jersey. [1815-25; (NEW) JERSEY + -MAN]

**Jersey pine**. See *Virginia pine*. [1735-45, Amer.]

**Jerubbaal** (jer/ə bāl', jer/ə bāl', -bāl'), n. Gideon (def. 1).



**Jerusalem** (ji rōō'sə ləm, -zə-), n. a city in and the capital of Israel: an ancient holy city and a center of pilgrimage for Jews, Christians, and Muslims; divided between Israel and Jordan 1948-67; Jordanian sector annexed by Israel 1967; capital of Israel since 1950. 407,100. —*Jerusalem-ite*, n., adj.

**Jerusalem artichoke**. Also called *girasol*. a sunflower, *Helianthus tuberosus*, having edible, tuberous, underground stems or rootstocks. 2. Also called *sunchoke*. the tuber itself. [1635-45; alter. of *It girasole* *artichocco* edible sunflower. See *GIRASOL*, *ARTICHOKE*]

**Jerusalem cherry**, an Old World plant, *Solanum pseudocapsicum*, of the nightshade family, having white flowers and bearing cherrylike scarlet or yellow fruits, cultivated as an ornamental. [1780-90, Amer.]

**Jerusalem cricket**, a large, nocturnal, wingless, long-horned grasshopper, *Stenopelmatus fuscus*, occurring chiefly in loose soil and sand along the Pacific coast of the U.S. Also called *sand cricket*. [1945-50, Amer.]

**Jerusalem cross**, 1. a cross whose four arms are each capped with a crossbar and often with a small Greek cross centered in each quadrant. 2. See *scarlet lychnis*. [1605-15]

**Jerusalem date**. See *butterfly flower*.

**Jerusalem oak**. See *feather geranium*. [1750-60]

**Jerusalem thorn**, 1. See under *Christ's thorn*. 2. a spiny tropical American tree, *Parkinsonia aculeata*, of the legume family, having long clusters of large yellow flowers. [1865-70]

**Jesper** (jes/par sən, jes/par sən), n. (Jens) Ot-to (Härry) (yens ot/ə härr/ē), 1860-1943, Danish philologist.

**Jess** (jes), *Falconry*. —*n.* 1. a short strap fastened around the leg of a hawk and attached to the leash. —*v.t.* 2. to put jesses on (a hawk). [1300-50; ME *ges* < OF *ges*, *gez*, *getz* (nom.) (get obl. < F *jet*; cf. *JET*) < L

**Jesse, Jessie, or Jessica.**

**Jes-sa** (jes/ə min), n. jasmine.

**Jes-sa** (jes/ə min), n. a female given name, form of *Jasmine*. Also, *Jes-sa-mine*.

**Jes-sant** (jes/ənt), adj. *Heraldry.* 1. shooting up, as a plant. 2. coming forth; issuant. [1600-10; perh. alter. of obs. *issant* *ISSUANT*, by assoc. with obs. *jessant* (of a charge) lying on top of another charge < MF *gesant* (pp. of *gesir* < L *jacere* to lie), equiv. to *ges-* lie + -ant -ANT]

**Jes-se** (jes/ē), n. 1. the father of David. I Sam. 16. 2. a male given name: from a Hebrew word meaning "God exists."

**Jes-sel-ton** (jes/əl tən), n. former name of *Kota Kinabalu*.

**Jes-se tree**. See *tree of Jesse*.

**Jes-se win/dow**, a church window having a representation of the tree of Jesse. [1840-50]

**Jes-si-ca** (jes/i kə), n. a female given name, form of *Jesse*.

**Jes-sie** (jes/ē), n. a female given name, form of *Jessica*.

**Jest** (jest), n. 1. a joke or witty remark; witticism. 2. a bantering remark; a piece of good-natured ridicule; taunt. 3. sport or fun: to speak half in jest, half in earnest. 4. the object of laughter, sport, or mockery; laughing-stock. 5. Obs. an exploit. Cf. *facetious*. —*v.t.* 6. to speak in a playful, humorous, or facetious way; joke. 7. to speak or act in mere sport, rather than in earnest; trifle (often fol. by *with*): Please don't jest with me. 8. to utter derisive speeches; gibe or scoff. —*v.t.* 9. to deride or joke at; banter. [1250-1300; ME; var. sp. of *gest*] —*Jest-ful*, adj. —*Jest-ing-ly*, adv. —*Syn.* 1. quip. See *joke*. 2. jape, gibe. 4. butt.

**Jest-book** (jest/bōk'), n. a book of jests or jokes. [1740-50]

**Jest-er** (jes/tər), n. 1. a person who is given to witticisms, jokes, and pranks. 2. a professional fool or clown, esp. at a medieval court. [1325-75; ME *gester*. See *GEST*, -ER]

**Jes-su** (jē/zōō, -sōō, jā-, yā-), n. *Literary.* Jesus. [1150-1200; ME < LL *Iēsu*, obl. (orig. voc.) form of *Iēsus* < Gk *Iēsoû*; see *JESUS*]

**Jes-u-it** (jēz/hōō it, jēz/hōō-, jēz/yōō-), n. 1. a member of a Roman Catholic religious order (Society of Jesus) founded by Ignatius of Loyola in 1534. 2. (often l.c.) a crafty, intriguing, or equivocal person: so called in allusion to the methods ascribed to the order by its opponents. —*adj.* 3. of or pertaining to Jesuits or Jesuitism. [1550-60; < NL *Jesuita*, equiv. to L *Iēsu(s)* + -ita -itē']

**Jes-u-it-ical** (jēz/hōō it/i kəl, jēz/hōō-, jēz/yōō-), adj. 1. of or pertaining to Jesuits or Jesuitism. 2. (often l.c.) practicing casuistry or equivocation; using subtle or oversubtle reasoning; crafty; sly; intriguing. Also, *Jes-u-it/ic*. [1590-1600; JESUIT + -ICAL] —*Jes-u-it-ical-ly*, adv.

**Jes-u-it-ism** (jēz/hōō it iz/əm, jēz/hōō-, jēz/yōō-), n. 1. the system, principles, or practices of the Jesuits. 2. (often l.c.) a principle or practice, as casuistry, equivocation, or craft, ascribed to the Jesuits by their opponents. Also, *Jes-u-it-ry*. [1600-10; JESUIT + -ISM]

**Jes-u-it-ize** (jēz/hōō it iz/, jēz/hōō-, jēz/yōō-), *v.t.*, *v.i.*, -ized, -izing. to make Jesuit or to become a Jesuit. Also, esp. *Brit.*, *Jes-u-it-ise*. [1635-45; JESUIT + -IZE] —*Jes-u-it-iza-tion*, n.

**Jes-uit's bark**, cinchona (def. 2). [1685-95; introduced into Europe from the Jesuit missions in South America]

**Jes-uits' res'in**, copaiba.

**Jes-uit ware**, Chinese porcelain of the early 18th century, decorated with Christian motifs, usually in black and gold on a white background.

**Jes-us** (jē/zəs, -zaz), n. 1. Also called *Jesus Christ*, *Christ Jesus*, *Jes-us of Nazareth*, born 4? b.c., crucified A.D. 29?, the source of the Christian religion. 2. ("the Son of Sirach") the author of the Apocryphal book of Ecclesiasticus, who lived in the 3rd century b.c. 3. *Christian Science.* the supreme example of God's nature expressed through human beings. 4. Also, *Jes-us* (Sp. he soōs/). a male given name. —*interj.* 5. (used as an oath or strong expression of disbelief, dismay, awe, disappointment, pain, etc.) [1200-50; ME < LL *Iēsus* < Gk *Iēsoûs* < Heb *Yēshua*, synecopated var. of *Yēhōshua* God is help; in Early Modern E., the distinction (lost in ME) between *Jesus* (nom.) and *Jesu* (obl., especially voc.; see *Jesu*) was revived on the model of L and Gk sources; *Jesu* gradually supplanted the older form in both nom. and obl.]

**Jes-us Christ**, 1. *Jesus* (def. 1). 2. *Jesus* (def. 5).

**Jes-us freak**, *Informal.* a member of any of several fundamentalist groups of chiefly young people (*Jes-us peo-ple*) originating in the early 1970's and emphasizing intense personal devotion to and study of *Jesus Christ* and his teachings. [1970-75]

**Jet** (jet), n., v. *Jet-ted, jet-ting, adj.* —*n.* 1. a stream of a liquid, gas, or small solid particles forcefully shooting forth from a nozzle, orifice, etc. 2. something that issues in such a stream, as water or gas. 3. a spout or nozzle for emitting liquid or gas: a gas jet. 4. See *jet plane*. 5. See *jet engine*. —*v.i.* 6. to travel by jet plane: to jet to Las Vegas for the weekend. 7. to move or travel by means of jet propulsion: The octopus jetted away from danger. 8. to be shot forth in a stream. 9. to move or travel rapidly: The star halfback jetted toward

CONCISE PRONUNCIATION KEY: act, cape, dare, part; set, equal; if, we; ox, over, order, oil, both, boot, out; up, urge; child; sing; shoe; thin; that; zh as in treasure, *z* as in alone, *e* as in system, *i* as in easily, *o* as in gallop, *u* as in circus, *y* as in fire (fī'r), hour (hou'r) *l* and *n* can serve as syllabic consonants, as in *cradle* (krā'dl) and

**the goal line.** —*v.t.* 10. to transport by jet plane: *The nonstop service from New York will jet you to Tokyo in 13 hours.* 11. to shoot (something) forth in a stream; spout. 12. to place (a pile or the like) by eroding the ground beneath it with a jet of water or of water and compressed air. —*adj.* 13. of, pertaining to, or associated with a jet, jet engine, or jet plane: *jet pilot; jet exhaust.* 14. in the form of or producing a jet or jet propulsion: *jet nozzle.* 15. by means of a jet airplane: *a jet trip; jet transportation.* [1580-90; 1940-45 for def. 4; < MF *jeter* to throw < VL *\*jētare*, alter. of L *jactāre*, equiv. to *jac-* throw + *-t-* freq. suffix + *-āre* inf. suffix]

**jet** (jet), *n.* 1. a compact black coal, susceptible of a high polish, used for making beads, jewelry, buttons, etc. 2. a deep black. 3. Obs. black marble. —*adj.* 4. consisting of or made of jet. 5. of the color jet; black as jet. [1350-1400; ME *jet*, get < OF *jalet* < L *gagates* < Gk (*lithos*) *gagatēs* Gagatic (stone), named after *Gagai*, town in Lycia; cf. obs. *gagate*, ME, OE *gagates* < L, as above]

**jet/air/plane.** See **jet plane.** [1940-45]

**jet-a-va-tor** (jet/ə vā'tər), *n.* *Rocketry.* an extension of the exhaust nozzle of a rocket, for controlling the direction of the exhaust gases. [1955-60; JET + (EL)EVATOR]

**jet-bead** (jet/bēd'), *n.* a shrub, *Rhodotypos scandens*, of the rose family, having white flowers and glossy black fruit, cultivated as an ornamental. Also called **white korria**. [1925-30; JET + BEAD]

**jet-black** (jet/blak'), *adj.* deep-black: *jet-black hair.* [1475-85]

**jet/boat**, a small, propellerless boat powered by an engine that ejects water for its thrust. Also, **jet/boat**. [1960-65] —**jet/boat/ing.**

**jet-borne** (jet/bōrn', -bōrn'), *adj.* 1. carried by jet aircraft. 2. carried by the westerly jet stream. [1965-70; JET + (AIR)BORNE]

**jet/condens'er**, a steam condenser in which a jet of water is sprayed into the condenser chamber.

**jet-té** (zhā tā'), *n., pl. -tés* (-tāz'; Fr. -tā'). *Ballet.* a jump forward, backward, or to the side, from one foot to the other. [1820-30; < F. lit., thrown, ptp. of *jeter* to throw; see JET]

**jet/-am-elled ware** (jet/i nam'əld), English Worcester porcelain ware of the 18th century, transfer-printed in black.

**jet/eng'ine**, an engine, as an aircraft engine, that produces forward motion by the rearward exhaust of a jet of fluid or heated air and gases. Also called **jet/motor**. [1940-45]

**jet/gun**, a small, pressurized device that injects a drug at sufficient velocity to penetrate the skin, used esp. for immunizations. Also called **jet/injector**.

**jet-hop** (jet/hop'), *v.i., -hopped, -hop-ping*, to travel by jet plane, esp. to travel to a series of destinations on one trip. [1965-70]

**Jeth-ro** (jeth/rō), *n.* 1. the father-in-law of Moses. Ex. 3:1. 2. a male given name.

**jet/lag**, a temporary disruption of the body's normal biological rhythms after high-speed air travel through several time zones. Also, **jet/lag**. [1965-70] —**jet/lagged**, *adj.*

**jet-lin'er** (jet/li'nər), *n.* a commercial jet plane for carrying passengers. [1945-50; JET + (AIR)LINER]

**jet/plane**, an airplane moved by jet propulsion. Also called **jet, jet airplane**. [1940-45]

**jet-port** (jet/pōrt', -pōrt'), *n.* an airport designed to handle commercial jet planes. [1960-65; JET + PORT]

**jet/print'ing.** See **ink-jet printing.**

**jet-propelled** (jet/prə peld'), *adj.* 1. propelled by a jet engine or engines. 2. *Informal.* having a force or speed suggesting something propelled by a jet engine; fast or powerful. [1875-80]

**jet/propul'sion**, the propulsion of a body by its reaction to a force ejecting a gas or a liquid from it. [1865-70]

**jet-sam** (jet/səm), *n.* goods cast overboard deliberately, as to lighten a vessel or improve its stability in an emergency, which sink where jettisoned or are washed ashore. Also, **jet/som**. Cf. **flotsam, lagan**. [1560-70; alter. of *jetsom*, syncope of *jet-tison*]

**jet/set**, a fashionable social set composed of wealthy people who travel frequently by jetliner to parties and resorts. [1950-55] —**jet/-set/ter**, *n.*

**jet/stream**, 1. strong, generally westerly winds concentrated in a relatively narrow and shallow stream in the upper troposphere of the earth. 2. similar strong winds in the atmosphere of another planet: *jet streams on Jupiter.* 3. the exhaust of a jet or rocket engine. [1945-50]

**jet-ti-son** (jet/ə sən, -zən), *v.t.* 1. to cast (goods) overboard in order to lighten a vessel or aircraft or to improve its stability in an emergency. 2. to throw off (something) as an obstacle or burden; discard. 3. *Cards.* to discard (an unwanted card or cards). —*n.* 4. the act of casting goods overboard to lighten a vessel or aircraft or to improve its stability in an emergency. 5. *jetsam*. [1375-1425; late ME *jettison* < AF, OF *getaison* < L *jactatiō-* (s. of *jactatū*) JACTATION] —**jet/-ti-son-a-ble**, *adj.*

**jet-ton** (jet/n), *n.* an inscribed counter or token. [1755-65; < F *jeton*, equiv. to *jet(er)* to throw, cast up (accounts), reckon (see JET) + *-on* n. suffix]

into the sea or other body of water to protect a harbor, deflect the current, etc. 2. a wharf or landing pier. 3. the piles or wooden structure protecting a pier. 4. Also, **jutty**. *Archit.* an overhang, as of an upper story beyond a lower. —*v.t.* 5. to construct (part of a building) so that it projects beyond lower construction; jutty. [1375-1425; late ME *get(t)ey* < OF *jete*, lit., something thrown out, a projection, *n.* use of *jete*, fem. ptp. of *jeter* to throw; see JET]

**jet-ty** (jet/tē), *adj.* 1. made of jet. 2. resembling jet, esp. in color; of a deep black. [1475-85; JET + -y'] —**jet/-ti-ness**, *n.*

**jet/wash**, *Aeron.* the backwash caused by a jet engine.

**Jet-way** (jet/wā'), *Trademark.* an enclosed, telescoping, movable ramplike bridge connecting an airport terminal and an aircraft, for use by passengers in boarding and disembarking.

**jeu** (zhœ), *n., pl. jeux* (zhœ). *French.* a game.

**jeu de mots** (zhœd' mō'), *pl. jeux de mots* (zhœd' mō'). *French.* a pun. [lit., play of words]

**jeu d'esprit** (zhœ des prē'), *pl. jeux d'esprit* (zhœ des prē'). *French.* 1. a witticism. 2. a literary work showing keen wit or intelligence rather than profundity. [lit., play of spirit]

**jeune fille** (zhœn fē'y'), *pl. jeunes filles* (zhœn fē'y'). *French.* a girl or young woman.

**jeune premier** (Fr. zhœn prā myā'), *pl. jeunes premiers* (Fr. zhœn prā myā'). 1. the male juvenile lead in a play or movie. 2. a young actor who plays such a role. [1850-55; < F. lit., young first (actor)]

**jeune première** (Fr. zhœn prā myēr'), *pl. jeunes premières* (Fr. zhœn prā myēr'). 1. the female juvenile lead in a play or movie. 2. a young actress who plays such a role. [1920-25; < F. lit., young first (actress)]

**jeunesse do-rée** (zhœ nes dō rā'), *French.* wealthy, stylish, sophisticated young people. [lit., gilded youth]

**Jev-sons** (jev'ənz), *n.* William Stanley, 1835-82, English economist and logician.

**Jew** (jō), *n.* 1. one of a scattered group of people that traces its descent from the Biblical Hebrews or from postexilic adherents of Judaism; Israelite. 2. a person whose religion is Judaism. 3. a subject of the ancient kingdom of Judah. —*adj.* 4. *Offensive.* of Jews; Jewish. —*v.t.* 5. (l.c.) *Offensive.* to bargain sharply with; beat down in price (often fol. by *down*). [1125-75; ME *ewe*, *giu*, *gyu*, *ju* < OF *juu*, *juieu*, *gyu* < LL *iudēus*, L *iudaeus* < Gk *ioudaios* < Aram *yehūdāi* < Heb *yehūdhi*, deriv. of *yehūdāh* JUDAH; *r.* OE *iūdeas* Jews < LL *iudēus*) + OE *-as* pl. ending]

**Jew**, Jewish.

**Jew-bait-ing** (jō/bā'ting), *n.* active anti-Semitism. [1890-95] —**Jew/-bait'er**, *n.*

**jew-el** (jō'əl), *n., v., -eled, -el-ing* or (esp. Brit.) *-elled, -el-ing*. —*n.* 1. a cut and polished precious stone; gem. 2. a fashioned ornament for personal adornment, esp. of a precious metal set with gems. 3. a precious possession. 4. a person or thing that is treasured, esteemed, or indispensable. 5. a durable bearing used in fine timepieces and other delicate instruments, made of natural or synthetic precious stone or other very hard material. 6. an ornamental boss of glass, sometimes cut with facets, in stained-glass work. 7. something resembling a jewel in appearance, ornamental effect, or the like, as a star or dewdrop. —*v.t.* 8. to set or adorn with jewels. [1250-1300; ME *jewel* *juel* < AF *jeul*, OF *jouel*, *joel* < VL *\*jocālis* plaything, *n.* use of neut. of *\*jocālis* (adj.) of play, equiv. to L *joc(us)* JOKE + *-ālis* -AL'] —**jew/el-like**, *adj.*

**Jew-el** (jō'əl), *n.* a female given name.

**jew/el block**, *Naut.* a block at the end of a yard or gaff for supporting a signal or ensign halyard. Also called **dasher block**. [1760-70]

**jew/el case**, a small box or chest, often lined in a soft fabric and fitted with compartments, designed to hold jewelry. Also called **jew/el box**. [1855-60]

**jew-el-er** (jō'əl ə'r), *n.* a person who designs, makes, sells, or repairs jewelry, watches, etc.; a person who deals in jewels. Also, esp. Brit., **jew/el-ier**. [1300-50; ME *jueler* < AF *jueler*, MF *juelier*. See JEWEL, -ER']

**jew/elers' put/ty.** See **putty powder.**

**jew/elers' rouge**, colcothar.

**jew/elers' saw/ frame**, a U-shaped steel frame with a handle and clamps that hold a piercing saw.

**jew-el-fish** (jō'əl fīsh'), *n., pl. -fish-es*, (esp. collectively) *-fish*. a brightly colored cichlid fish, *Hemichromis bimaculatus*, native to Africa; popular in home aquariums. [JEWEL + FISH]

**jew-el-ry** (jō'əl rē), *n.* 1. articles of gold, silver, precious stones, etc., for personal adornment. 2. any ornaments for personal adornment, as necklaces or cuff links, including those of base metals, glass, plastic, or the like. Also, esp. Brit., **jew/el-ier-y**. [1300-50; ME *juerie* < AF *juelerie*, equiv. to *juel* JEWEL + *-erie* -ERY]

**jew-el-weed** (jō'əl wēd'), *n.* any of several plants of the genus *Impatiens*, esp. *I. capensis*, having orange-yellow flowers spotted with reddish brown, or *I. pallida*, having yellow flowers sometimes spotted with brownish red. Cf. **touch-me-not**. [1810-20, Amer.; JEWEL + WEED']

*nepheles itajara* and *E. nigrilus*, found in the Atlantic Ocean. [1690-1700; appar. Jew + FISH]

**Jew-ish** (jō'ish), *adj.* 1. of, pertaining to, or teristic of the Jews or Judaism: *Jewish customs.* *formal Yiddish.* —*n.* 3. *Informal Yiddish.* [Jew + -ish'; cf. OE *iudēisc* < LL *iudē(us)* Jew -isc -ISH'] —**Jew/ish-ly**, *adv.*

**Jew/ish Amer/ican Prin'cess.** See **JAP.**

**Jew/ish Auton/omous Re'gion**, official *n.* **Birobizhan.**

**Jew/ish cal'endar**, the lunisolar calendar of Jews, as for determining religious holidays, that, oned from 3761 B.C. and was established by Hillel the 4th century A.D., the calendar year consisting days (defective year), 354 days (regular year), days (perfect year or abundant year) and cor. 12 months: Tishri, Heshvan, Kislev, Tevet, Sheva, Nisan, Iyar, Sivan, Tammuz, Av, and Elul, with day intercalary month of Adar Sheni added after seven times in every 19-year cycle in order to ad. calendar to the solar cycle. The Jewish ecclesiastic begins with Nisan and the civil year with Tish; called **Hebrew calendar**. See table under **ca** [1885-90]

**Jew/ish Defense' League**, an organization of Jewish activists, founded in 1968 in the combat anti-Semitism and defend Jewish in worldwide. Abbr.: JDL

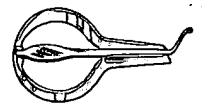
**Jew/ish-ness** (jō'ish nis), *n.* the state or qu. being Jewish. [1540-50; JEWISH + -NESS]

**Jew/ish Prin'cess.** See **JAP.** [1970-75, Amer]

**Jew-ry** (jō'rē), *n., pl. -ries*. 1. the Jewish people collectively. 2. a district inhabited mainly by Jews; 3. *Archaic.* Judea. [1175-1225; ME *jewerie* < AF (OF *juerie*), equiv. to *ju* Jew + *-erie* -ERY]

**Jew's harp**, (sometimes l.c.) a small, simple instrument consisting of a lyre-shaped metal frame taining a metal tongue, which is plucked while the is held in the teeth, the vibrations causing tw tones. Also, **Jew's harp**. [1585-95; perh. jocular lier called *Jew's trump*]

**Jew's harp**  
length about  
3 in. (8 cm)



**Jez-e-bel** (jez'ə bel', -bəl), *n.* 1. Also, **Douay Jez-a-bel**, the wife of Ahab, king of Israel. I 16:31. 2. (often l.c.) a wicked, shameless woman. **e-beli-an** (jez'ə bē'lē an, -bē'l'yan), **Jez-e-bel-ish** a bel/ish', *adj.*

**Jez-re-el** (jez'rē əl, -el', jez'rē'l'), *n.* Plain of, E. lon. —**Jez/-re-el-ite**, *n.*

**JFK**, John Fitzgerald Kennedy.

**jg**, junior grade. Also, **J.g.**

**jhā-na** (jā'nə), *n.* *Buddhism.* any of four el. states of mind possible as a result of meditation (Pali)

**Jhan-si** (jān'sē), *n.* a city in SW Uttar Pradesh, i. tral India. 198,101.

**Jhe-lum** (jā'ləm), *n.* a river in S Asia, flowing f. Kashmir into the Chenab River in Pakistan. 450 m km) long.

**JHS**, IHS (defs. 1, 2).

**J.H.S.**, junior high school.

**JHVH**, YHVH. Also, **JHWH**

**Jia-mu-si** (jyā'mv'sē'), *n.* *Pinyin.* a city in E He. jiang province, in NE China. 275,000. Also, **Chiam Kiamusze**.

**Jiang-ling** (jyāng'ling'), *n.* *Pinyin.* a city in S. I province, in central China, on the Chang Jiang. 1. Also, **Chiangling**, **Kiangling**. Formerly, **Kingchow**

**Jiang Qing** (Chin. jyāng' ching'), born 1914, wid Mao Zedong; leader of the Gang of Four, arrested convicted and jailed 1981.

**Jiang-su** (jyāng'sv'), *n.* *Pinyin.* a maritime pro. in E China. 44,500,000; 40,927 sq. mi. (106,001 sq. Cap.: Nanjing. Also, **Kiangsu**.

**Jiang-xi** (jyāng'shē'), *n.* *Pinyin.* a province i. China. 21,070,000; 63,629 sq. mi. (164,799 sq. km). Nanchang. Also, **Kiangsi**.

**jiao** (jyou), *n., pl. jiao. a copper-zinc coin and n. tary unit of the People's Republic of China, the 10th of a yuan, equal to 10 fen. Also, **chiao**. [1970-75; < *jiāo*]*

**Jiao-zhou** (jyou'jō'), *n.* *Pinyin.* a former Ger. leased territory (1898-1914) on the Shandong pen. in E China, around Jiaozhou Bay. 200 sq. mi. (51 km). Chief city, Tsingtao. Also, **Chiaochow**, **Kiaochow**

**Jiao'zhou' Bay**, an inlet of the Yellow Sea, China, in Shandong province, 20 mi. (32 km) long; 1 (24 km) wide. Also, **Chiaochow Bay**, **Kiaochow Ba**

**Jia-yi** (jyā'yē'), *n.* *Pinyin.* Chiao.

**jib** (jib), *n.* *Naut.* 1. any of various triangular sail forward of a foremast or mainmast.